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I. INTRODUCTION

None of the terms that Defendant Meta Platforms, Inc. (“Meta”) has identified require construction, as Meta has not rebutted the “heavy presumption” that claim terms carry their plain and ordinary meaning “in the relevant community at the relevant time.” *Maxell, Ltd. v. Amperex Tech. Ltd.*, No. W-21-CV-00347-ADA, 2022 U.S. Dist. LEXIS 204753, at *4 (W.D. Tex. Nov. 10, 2022) (cleaned up). The two exceptions to this rule are when patentees (1) act as their own lexicographer or (2) disavow the full scope of the claim term in the intrinsic record. *See Nitride Semiconductors Co., Ltd. v. Lite-On Tech. Corp.*, No. W-21-CV-00183-ADA, 2022 U.S. Dist. LEXIS 215332, at *4 (W.D. Tex. Nov. 30, 2022). The Federal Circuit has cautioned that the standards for finding lexicography and disavowal are “exacting.” *Sonrai Memory Ltd. v. Kingston Tech. Co.*, No. 6-21-CV-01284-ADA-DTG, 2022 U.S. Dist. LEXIS 150832, at *6 (W.D. Tex. Aug. 23, 2022), citing *Hill-Rom Servs., Inc. v. Stryker Corp.*, 755 F.3d 1367, 1371 (Fed. Cir. 2014), *Thorner v. Sony Computer Ent. Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012). For lexicography, the patentee must “clearly set forth a definition of the disputed claim term,” and “clearly express an intent to define the term.” *Flypsi, Inc. v. Dialpad, Inc.*, No. 6:21-CV-00642-ADA, 2022 U.S. Dist. LEXIS 149866, at *3 (W.D. Tex. Aug. 22, 2022) (citations omitted). For disavowal, the patentee’s statements in the specification or prosecution history must represent “a clear disavowal of claim scope.” *Id.* at *4 (citations omitted).

Meta, ignoring these well-known standards, seeks unnecessary revisions of well-understood terms, most of which either (i) add new limitations that appear nowhere in the claims themselves, or (ii) seek to alter plain claim language, often in a manner that disregards surrounding claim language or the teachings of the specification. In short, Meta fails to identify any acts of lexicography or disavowals sufficient to justify its proposed deviations from plain and ordinary meaning.

II. BACKGROUND OF THE ASSERTED PATENTS

The patents-in-suit are U.S. Patent Nos. 8,469,806 (the “’806 patent”); 8,896,524 (the “’524 patent”); 9,727,217 (the “’217 patent”); 10,248,298 (the “’298 patent”); 10,664,143 (the “’143 patent”); and 10,269,222 (the “’222 patent”) (collectively, the “Patents-in-Suit”).

The Patents-in-Suit generally teach novel systems and methods for establishing haptically enhanced interactivity with virtual objects within a virtual environment. The claimed systems and methods combine specific hardware and software components in unconventional ways. In contrast, conventional systems at the time provided rudimentary mechanisms for applying static effects that merely informed users that basic events occurred. Through novel innovations, the Patents-in-Suit expand haptic stimulation to provide users feedback through equipment providing real-world controls in virtual environments to simulate a wide array of experiences, such as: that a control gesture has been received, that virtual or real objects have collided, exploded, or imploded, that an ambient force is present (e.g., simulated or real wind, rain, magnetism, and/or other virtual forces), and/or that other phenomena have occurred. The combinations of features are uniquely technological, and each claim improves on the known systems and methods for providing haptic feedback at the relevant time.

For example, the ’806 patent teaches applying haptic stimulation in conjunction with the performance of “control gestures” through which the user inputs commands into, for example, a game or virtual world via a real-world controller. Such control gestures comprise separate portions with different haptic feedback over the duration of the gesture—resulting in a more intuitive and immersive user experience.

The ’524 patent further teaches the use of “context metadata,” which includes, for example, metadata generated when a user interacts with a user interface element such as pushing a virtual button. The confirmation haptic effect can be a modification of, for example, magnitude, duration, frequency, and waveform. Thus, the haptic confirmation system can generate multiple possible

confirmation haptic events for a single user interface element, where each confirmation haptic event is individually customized based on context metadata.

The '217 and '298 patents disclose the use of multiple peripherals, such as a controller for each hand, that freely move through the real-world. This enables users to manipulate a physical object in the real world to interact with a virtual object through, for example, at least three degrees of freedom—providing a physical sense of interaction with virtual objects.

The '222 patent teaches the use of a wearable device, including a wearable device configured as headwear that can include a plurality of hardware, software, and/or firmware components that can generate haptic feedback based on events that occur in an environment related to the wearable device. This enables users to better recognize objects in virtual and/or augmented reality environments.

Lastly, the '143 patent teaches the use of a peripheral worn on the head, which is tracked in real space, to interact with a virtual environment. This allows for viewing different displayed interactive content and experiencing different haptic feedback based in part on the user's head position.

III. ARGUMENT

A. “control gesture” ('806 patent, claims 11, 12, 15)

Plaintiff's Construction	Defendants' Construction
<p>Plain and ordinary meaning</p> <p>To the extent the Court believes that any further construction is necessary, the term may include “a user manipulation having separate portions that must be performed in a specific order and/or with a specific timing”</p>	<p>“a gesture made by a user that is a single and discrete control input having separate portions. The separate portions must be performed in specific order and/or with a specific timing to effectively achieve the control input associated with the ‘control gesture.’ Performance of the separate portions, on their own, will not result in the control input associated with the ‘control gesture’ as a whole (e.g., a ‘control gesture’ is not merely a combination of other gestures, each associated with its own control input)”</p>

This term requires no construction, as a jury can easily understand the common words “control” and “gesture” (and their combination), as further clarified by intrinsic evidence found in the specification. *See, e.g., Sesaco Corp. v. Equinom Ltd.*, No. 1:20-CV-01053-LY, 2022 U.S. Dist.

LEXIS 213636, at *4 (W.D. Tex. Nov. 28, 2022) (“In some cases, the ordinary meaning of claim language may be readily apparent and claim construction will involve little more than the application of the widely accepted meaning of commonly understood words.”).

Here, the plain meaning of this term is evident from the intrinsic record and includes “a user manipulation having separate portions that must be performed in a specific order and/or with a specific timing.” *See, e.g.*, ’806 patent at 17:58-67. The plain meaning of this term finds direct support in the specification (as indeed Meta acknowledges; *see* Dkt. No. 33 at 3-4). The specification further describes that a “gesture” may include a “manipulation.” *See, e.g.*, ’806 patent at 17:58-67 (“Control gestures may include (with or without touch gestures) manipulation of a component or body (e.g., ‘tilt’ controls), manipulation of one or more stick controls, manipulation of one or more buttons, manipulation of one or more switches, and/or manipulation of or interaction with other interface features.”). Thus, this term should retain its plain and ordinary meaning, with, if necessary, the foregoing brief explanation of what the plain and ordinary meaning may include. *Nitride Semiconductors*, 2022 U.S. Dist. LEXIS 215332 at *27-29 (agreeing that patentee’s proposed construction for disputed term was plain and ordinary meaning); *IOENGINE, LLC v. Roku, Inc.*, No. 6:21-CV-01296-ADA, 2022 U.S. Dist. LEXIS 189696, at *19-24 (W.D. Tex. Oct. 17, 2022) (applying patentee’s construction as plain and ordinary meaning).

Meta points to no portion of the intrinsic record meeting the exacting standard for lexicography to define “control gesture” (as it proposes with a meaning outside of the ordinary), or to a clear disavowal of claim scope. *See* Dkt. No. 33 at 3-4. Instead, its cited passage is merely a description of examples of “control gestures” that cannot reasonably be read as a “clear and unmistakable” intent by the patentee to set forth a paragraph-long exclusive definition. *See Flypsi*, 2022 U.S. Dist. LEXIS 149866 at *4, citing *3M Innovative Props. Co. v. Tredegar Corp.*, 725 F.3d 1315, 1326 (Fed. Cir. 2013) (When “an applicant’s statements are amenable to multiple reasonable interpretations, they

cannot be deemed clear and unmistakable.”).

Even if Meta could show that the applicants acted as lexicographers, Meta overreaches in asking the Court to read an entire paragraph of *description* into its construction. *See Flypsi*, 2022 U.S. Dist. LEXIS 149866 at *4 (“Although the specification may aid the court in interpreting the meaning of disputed claim language, particular embodiments and examples appearing in the specification will not generally be read into the claims.”) (citations omitted); *IOENGINE*, 2022 U.S. Dist. LEXIS 189696 at *21-22 (attempts to import a limitation from the specification are a “cardinal sin” (citing *Phillips v. AWH Corp.*, 415 F.3d 1303, 1320 (Fed. Cir. 2005); *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 913 (Fed. Cir. 2004) (“[I]t is improper to read limitations from a preferred embodiment described in the specification—even if it is the only embodiment—into the claims absent a clear indication in the intrinsic record that the patentee intended the claims to be so limited.”)).

First, Meta’s cited patent passage includes an *example* in a parenthetical stated in the negative that is not definitional: “(*e.g.*, a ‘control gesture’ is not merely a combination of other gestures, each associated with its own control input).” ’806 patent at 5:14-16 (emphasis added); *see also Flypsi*, 2022 U.S. Dist. LEXIS 149866 at *4 (“Although the specification may aid the court in interpreting the meaning of disputed claim language, particular embodiments and examples appearing in the specification will not generally be read into the claims.”) (citations omitted). This *parenthetical* simply restates the previous disclosure in the negative as an example. Read in this way, this statement also cannot be deemed a “clear and unmistakable” disavowal. *See id.* (“When ‘an applicant’s statements are amenable to multiple reasonable interpretations, they cannot be deemed clear and unmistakable.’”) (citing *3M Innovative Props.*, 725 F.3d 1315 at 1326). Such permissive language “is hardly a clear definition” that meets the exacting standards to find lexicography or disavowal. *See Sonrai Memory*, 2022 U.S. Dist. LEXIS 150832 at *24-25 (finding the use of “permissive, but not obligatory words” “is hardly a clear definition”). Moreover, negative constructions are generally disfavored. *See USB Bridge*

Sols., LLC v. Buffalo Inc., No. 1-17-CV-001158-LY, 2020 U.S. Dist. LEXIS 67678, at *33-34, 37-38 (W.D. Tex. Apr. 17, 2020) (declining to adopt unnecessary negative limitation). Thus, Meta’s proposal invites confusion and should be rejected.

Second, using the word “gesture” to define itself does nothing to clarify the term and confirms that it needs no construction. *See, e.g., Profectus Tech. LLC v. Huawei Techs. Co., Ltd.*, No. 6:11-cv-474, 2014 U.S. Dist. LEXIS 53157 (E.D. Tex. Apr. 16, 2014) (definition that is simply recitation of words that court is seeking to define is unhelpful), citing *Abbott Labs. v. Sandoz, Inc.*, 544 F.3d 1341, 1360 (Fed. Cir. 2008) (noting that claim construction “usually requires use of words other than the words that are being defined”); *Sparton Corp. v. United States*, 68 Fed. Cl. 34 (2005) (“To the extent that Plaintiff’s proposed meaning is a circular definition (i.e., one that uses the word that it attempts to define in the definition itself), it is clearly improper.”).

Third, Meta’s improper importation of limitations runs afoul of basic claim differentiation. Independent Claim 11 recites, “wherein the control gesture is a gesture associated with a command input to the system, and includes an initial portion, a first intermediate portion, and an ending portion.” Further, its dependent Claim 15 recites, “wherein the command input associated with the control gesture is a single, discrete command.” Accordingly, Meta’s proposal that a control gesture is “a single and discrete control input having separate portions” “to effectively achieve the control input associated with the ‘control gesture’” would render dependent claims redundant. Courts have repeatedly rejected constructions that are redundant of either the claims or the core concepts disclosed in the specification. *See, e.g., Glob. Sessions LP v. Comerica Bank*, No. A-13-CA-691-SS, 2014 U.S. Dist. LEXIS 125271, at *14 (W.D. Tex. Sept. 8, 2014) (“It is not necessary to complicate the jury’s task in this case with yet another defined phrase, particularly when that definition only repeats the explanation of the core concept introduced in the first column of the patent.”).

Even Meta’s cited cases do not support importing an entire paragraph into its construction

when finding lexicography. Meta cites *Chevron U.S.A. Inc. v. Univ. of Wyoming Rsch. Corp.* (see Dkt. No. 33 at 4)—but in that case the Federal Circuit notably did not adopt the entirety of the “as used herein” statement sought by Chevron. See 978 F.3d 1361, 1364 (Fed. Cir. 2020) (declining to adopt “having a solubility parameter at least 1 MPa^{0.5} higher than the alkane mobile phase solvent to the column” in its construction). Similarly, a court in this District arrived at an analogous finding by adopting a construction consistent with the definition without the wholesale importing of an expository paragraph. See *Cisco Sys. v. Innovative Wireless Sols., LLC*, No. 1:13-CV-00492-LY, 2015 U.S. Dist. LEXIS 2104 at *17-19 (W.D. Tex. Jan. 8, 2015) (construing CSMA/CD as, “as defined in either the IEEE 802.3 Standard or the 1985 Version 2 Standard for Ethernet” despite lengthier descriptions). Thus, even if Meta could show that the applicants acted as lexicographers, Immersion’s proposed additional language reflects the actual disclosures in the intrinsic record and should be adopted.

Because adopting Meta’s construction would only serve to confuse the jury, the Court should apply the plain and ordinary meaning, clarified, to the extent necessary, as above by Immersion.

B. “confirmation haptic effect” (’524 patent, claims 1, 11)

Plaintiff’s Construction	Defendants’ Construction
<p>Plain and ordinary meaning</p> <p>To the extent the Court believes that any further construction is necessary, the plain and ordinary meaning includes “one of multiple possible tactile feedback events for a single user interface element, customized based on context metadata, to confirm the interaction with the user interface element”</p>	<p>“a haptic feedback effect that is generated in response to a user interaction with a user interface element, in order to confirm the interaction with the user interface element”</p>

This term requires no construction beyond a plain and ordinary meaning, as a jury can easily understand the individual words “confirmation” and “haptic effect” (and their combination). See, e.g., *SAS Inst. v. World Programming Ltd.*, No. 2:18-cv-295-JRG, 2020 U.S. Dist. LEXIS 18713, at *18 (E.D. Tex. Feb. 5, 2020); *United States Well Servs. v. Halliburton Co.*, No. 6:21-CV-00367-ADA, 2022 U.S. Dist. LEXIS 50347, at *84 (W.D. Tex. Jan. 17, 2022) (giving disputed term plain and

ordinary meaning where term comprised “commonly understood words”).

If the Court believes further construction is necessary, read in light of the surrounding claim language and the intrinsic evidence, the plain and ordinary meaning of the term includes “one of multiple possible tactile feedback events for a single user interface element, customized based on context metadata, to confirm the interaction with the user interface element.” *See* ’524 patent at 1:14-26; 2:20-24; 4:58-5:31. This captures the meaning of the word “confirmation”—which Meta does not dispute—and also clarifies that the claim bases this effect on “context metadata”—a separate claim term discussed below that is relevant to “confirmation haptic effect”—an interplay that Meta’s proposed construction ignores.

Regarding the meaning of “haptic effect,” the specification explains that “[h]aptics is a *tactile and force feedback technology* that takes advantage of a user’s sense of touch by applying haptic feedback effects (i.e., ‘haptic effects’), such as forces, vibrations, and motions, to the user.” ’524 patent at 1:11-14. Accordingly, a “haptic effect” includes “a tactile feedback event,” as discussed further below. *Infra* III.C.

Regarding the meaning of “confirmation,” Claim 1’s preamble recites that “generating the confirmation haptic effect” comprises the claimed steps. Claim 1’s final step recites the actual generation of “the confirmation haptic effect.” Thus, the claim naturally requires the “confirmation haptic effect” to confirm that the preceding steps successfully occurred. In addition, the claims recite the following steps related to “generating the confirmation haptic effect”: (1) “receiving context metadata *associated with a user interaction of a user interface element . . .*”; (2) “mapping the received context metadata to one or more haptic parameters”; (3) “generating a haptic signal based at least in part on the one or more haptic parameters”; and (4) “sending the haptic signal to an actuator to *generate the confirmation haptic effect*” (emphases added). Thus, the claims provide that an actuator generates a confirmation haptic effect in response to a haptic signal that is based at least in part on one

or more haptic parameters that were mapped from a context metadata (*infra* III.C) associated with a user interaction of a user interface element.

The specification confirms this understanding by describing a “confirmation haptic effect” as confirmation of an interaction based on context metadata. *See, e.g.*, ’524 patent at 1:14-26 (“A device . . . can be configured to generate confirmation haptic effects in response to a user’s interaction with the device, **as a confirmation that the user has successfully interacted with the device.** . . . The user can experience the confirmation haptic effect, and can be made aware of the **successful interaction with the device.**”) (emphasis added). Immersion’s explanation of the plain meaning further reflects the core of the invention being, as the title describes, a “**context-dependent** haptic confirmation system.” *Id.* (emphasis added). The Abstract further describes, “[a] haptic confirmation system is provided that produces a confirmation haptic effect in response to a user interaction with a user interface element, where the confirmation haptic effect is **based on context metadata.**” *Id.* (emphasis added). Accordingly, a single user interface element may have multiple possible confirmation haptic events, depending on the context metadata received: “[t]hus, the haptic confirmation system can generate **multiple possible confirmation haptic events for a single user interface element**, where each confirmation haptic event is individually customized **based on context metadata.**” *Id.* at 2:20-24 (emphasis added). The specification further describes different confirmation haptic effects based on the functionality of the user interface element—e.g., inputting a character within a field versus inputting a word within that same field:

Thus, the functionality of the user interface element can be used to determine a confirmation haptic effect that is generated. For example, the inputting of a character within a field displayed within a touchscreen can generate **a confirmation haptic effect that is different from a confirmation haptic effect that is generated when a word is input within the field.**

Id. at 4:58-64. (emphasis added); *see also id.* at 4:64-5:2 (“However, the *same pressing of the button* displayed within the touchscreen to create an email message can cause a *different confirmation haptic effect* to be generated.”) (emphasis added); *see generally id.* at 5:3-31.

Meta argues against the plain and ordinary meaning of this term, arguing that the phrase “confirmation haptic effect” is not a term of art. *See* Dkt. No. 33 at 6. But that is not the question—the question is whether the term is understandable in light of the intrinsic record. Meta again fails to meet the “exacting” standards for finding lexicography or disavowal. *See Sonrai Memory*, 2022 U.S. Dist. LEXIS 150832 at *6. The portions of the specification that Meta cites as support merely provide a shorthand description of the claimed “confirmation haptic effect”—not a definition. *See* ’524 patent at 4:21-26 (“As is described below in greater detail, a confirmation haptic effect *can be* a haptic feedback effect, such as a force, vibration, and motion, which *can be* generated in response to a user interaction with a user interface element, in order to confirm the interaction with the user interface element.”) (emphasis added); *see also Sonrai Memory*, 2022 U.S. Dist. LEXIS 150832 at *24-25 (finding the use of “permissive, but not obligatory words” “is hardly a clear definition”).

There are numerous other problems with Meta’s proposed construction. First, Meta’s proposed construction is in large part circular, because it improperly defines the term “confirmation *haptic effect*” as a “*haptic* feedback *effect*.” *See Sparton Corp. v. United States*, 68 Fed. Cl. 34 (2005) (“To the extent that Plaintiff’s proposed meaning is a circular definition (i.e., one that uses the word that it attempts to define in the definition itself), it is clearly improper.”). Second, because the claims themselves establish the relevance of “context metadata” to the meaning of “confirmation haptic effect,” adopting Meta’s proposed construction would confuse the jury by separating the confirmation haptic effect from the context metadata on which it is based.¹ *See United States Well Servs.*, 2022 U.S.

¹ Meta further expands on this mischaracterization of the invention below when it expressly deletes any reference to “context” for the term, “*context* metadata,” as discussed below.

Dist. LEXIS 50347 at *49 (“As indicated in the claim, a ‘distribution unit’ is not limited to a ‘manifold,’ as USWS’s construction requires, but instead also includes ‘a body,’ ‘a plurality of connecting points,’ and ‘an arrangement of cables or conduits.’ Thus, construing ‘distribution unit’ as a ‘manifold’ would be incorrect and would confuse the jury as to whether a ‘distribution unit’ needs to have ‘a body . . . a plurality of connecting points . . . an arrangement of cables or conduits.’”); *see also Incom Corp. v. Radiant RFID, LLC*, No. 1-17-CV-009-LY, 2018 U.S. Dist. LEXIS 167519, at *29 (W.D. Tex. Sept. 28, 2018) (“It is highly disfavored to construe terms in a way that renders them void, meaningless, or superfluous.”).

Meta’s proposal adds no clarity and instead only confusingly reduces this term to an improper scope. Thus, this term should retain its plain and ordinary meaning. *See M-I LLC v. FPUSA, LLC*, No. 5:15-cv-406-DAE, 2019 U.S. Dist. LEXIS 242742, at *29 (W.D. Tex. Aug. 13, 2019) (applying plain and ordinary meaning to disputed term alongside explanation of plain and ordinary meaning “for the purposes of clarity and consistency”).

C. “context metadata” (’524 patent, claims 1, 6, 11, 13)

Plaintiff’s Construction	Defendants’ Construction
Plain and ordinary meaning	“any data associated with an interaction with the user interface element”

This term requires no construction as jurors can easily understand the individual words, “context” and “metadata” (as well as their combination). *See SAS Inst.*, 2020 U.S. Dist. LEXIS 18713 at *18; *Maxell*, 2022 U.S. Dist. LEXIS 204753 at *4. The claims themselves provide any necessary clarity by reciting the specific kinds of data that “context metadata” comprises, including: “data indicating a functionality of the user interface element, or data indicating a history of the user interface element” (*see* Claim 1) and “data indicating one or more physical properties of the user interface element, or sensor input data” (*see* Claim 6). *See Pilot Energy Sols., LLC v. OXY USA Inc.*, No. A-16-CA-00687-SS, 2017 U.S. Dist. LEXIS 138325 at *4 (W.D. Tex. Aug 25, 2017) (“The words in the

claims themselves are of primary importance in the analysis, as the claim language in a patent defines the scope of the invention”). Further, the specification describes context metadata as “any data associated *with a context* of the interaction with the user interface element.” ’524 patent at 4:15-19 (emphasis added). By using the word “context” in this way, the specification confirms that “context” should be given its ordinary meaning and needs no further definition.

Meta repeats its legal error discussed above by arguing against a plain and ordinary meaning without addressing the “exacting” standards for the “only two exceptions” against a customary meaning. *See, e.g., Nitride Semiconductors*, 2022 U.S. Dist. LEXIS 215332 at *4; *Sonrai Memory*, 2022 U.S. Dist. LEXIS at *6. Meta’s proposed construction displays two primary flaws: (1) it in large part parrots the existing claim language providing no additional clarity and (2) it also replaces “context metadata” with “any data”—both of which are improper. Replacing Meta’s proposed construction inline into the Claim 1 language demonstrates the redundancy: “receiving [any data associated with an interaction with the user interface element] associated with a user interaction of a user interface element.” *Glob. Sessions*, 2014 U.S. Dist. LEXIS 125271 at *14 (“Claims construction ‘is not an obligatory exercise in redundancy’”) citing *U.S. Surgical Corp. v. Ethicon, Inc.*, 103 F.3d 1554, 1568 (Fed. Cir. 1997); *see also Victor Co. of Japan, Inc. v. Intervideo, Inc.*, No. A-08-CA-041-SS, 2009 U.S. Dist. LEXIS 133777, at *20 (W.D. Tex. July 24, 2009) (“Replacing ‘leading sector’ with ‘sector including the start of the I-frame to be reproduced’ would be redundant, essentially referring to the inclusion of the start of the I-frame twice.”). As discussed above, Meta’s proposal also changes the scope of the claim by reading “context” out of the limitation. Meta’s proposal should be rejected.

D. “haptic parameter” (’524 patent, claims 1, 2, 3, 7, 11, 12, 14)

Plaintiff’s Construction	Defendants’ Construction
Plain and ordinary meaning	“a quantity of a haptic effect quality, such as magnitude, frequency, duration, amplitude (i.e., strength), waveform, or any other kind of quantifiable haptic parameter”

This term requires no construction as jurors can easily understand the individual words, “haptic” and “parameter” and their combination. *See generally* ’524 patent at 2:17-20 (“The customization of the confirmation haptic effect can be a modification of one or more haptic parameters, such as, ***but not limited to***, magnitude, duration, frequency, and waveform”) (emphasis added); 6:23-25 (“A haptic parameter is a quantity of a haptic effect quality, such as magnitude, frequency, duration, amplitude (i.e., strength), waveform, ***or any other kind of quantifiable haptic parameter***”) (emphasis added). The plain and ordinary meaning of this term is thus readily apparent.

Meta argues that “[p]atentee’s definition of ‘haptic parameter’ differentiates the claimed ‘haptic parameter’ from other possible parameters, such as the term ‘feedback parameter’ discussed below with respect to the ’217 and ’298 patents.” Dkt. No. 33 at 9. But Meta does not brief the term “feedback parameter,” and it is not clear what Meta means by this argument.

E. “real space” (’217 patent, claim 1; ’143 patent, claims 1, 8, 15) / “free space” (’298 patent, claims 1, 9, 17)

Plaintiff’s Construction	Defendants’ Construction
Plain and ordinary meaning To the extent the Court believes that any further construction is necessary, the plain and ordinary meaning includes “the three-dimensional real world user surroundings”	“an area in the real world”

The parties agree that the terms “real space” and “free space” are used synonymously. These terms require no construction, as jurors easily understand the individual words, “real/free” and “space” (and their combination) as they are used in the specifications and have straightforward meanings. *See, e.g., SAS Inst.*, 2020 U.S. Dist. LEXIS 18713 at *18; *Victor Co. of Japan*, 2009 U.S. Dist. LEXIS 133777 at *21 (finding that terms that were “commonly used and understood words with straightforward meanings” required no construction); *United States Well Servs.*, 2022 U.S. Dist. LEXIS 50347 at *84. To the extent that any construction is required, the plain and ordinary meaning is “the three-dimensional real world user surroundings.”

First, the claim language supports this interpretation. Claim 1 of the '217 patent recites “a manipulatable input device movable through real space in at least *three degrees of freedom*” and also recites that instructions cause the processor to “receive one or more sensor signals indicating a position of the manipulatable input device in the at least *three degrees of freedom*.” See '217 patent at 12:49-60 (emphasis added).

Second, the specification provides the following additional disclosure: “In some cases, users may manipulate a physical object *in the real world* in order to interact with a virtual object.” See '217 patent at 1:28-30 (emphasis added). Further, the specification discloses: “The imaging device 114 may be configured to capture information related to a *visual representation of the surroundings* of the digital device 106 or components thereof. *The surroundings may include a user*, a peripheral 102, the physical environment of the user, and/or other visual representations.” See *id.* at 4:58-5:4 (emphasis added).

Third, during prosecution, applicants clarified that a two-dimensional space is not a free space: “To the extent the mouse has a position sensor to sense the position of the mouse relative to the base, the position of the mouse relative to the base would only be sensed in *two dimensions, not free space*, and there is no need for the position of the mouse in free space, or the position of the base in free space to be sensed.” Ex. A ('217 FH, 06-25-2015 Applicant Amendment) at 7. These statements demonstrate how the inventor understood the invention. See *Monkeymedia, Inc. v. Amazon.Com, Inc.*, No. 1:20-CV-010-LY, 2022 U.S. Dist. LEXIS 213669, at *5 (W.D. Tex. Nov. 28, 2022) (“The prosecution history is another tool to supply the proper context for claim construction because it demonstrates how the inventor understood the invention.”)

Meta, yet again, repeats its legal error by arguing against a plain and ordinary meaning without addressing the “exacting” standards for the “only two exceptions” against a customary meaning. See, e.g., *Nitride Semiconductors*, 2022 U.S. Dist. LEXIS 215332 at *4; *Sonrai Memory*, 2022 U.S. Dist.

LEXIS at *6. Meta’s “area” limitation introduces ambiguity as it may include areas restricted to two-dimensional surfaces—which applicants plainly clarified does *not* constitute a “free” space. *See* Ex. A (’217 FH, 06-25-2015 Applicant Amendment) at 7. Nor would such two-dimensional surfaces describe a “real space” as described in the specification. Indeed, Meta cites no intrinsic evidence to support its construction and instead summarily concludes that because these terms describe the space in which the peripheral moves, these terms “must be *areas* in the real world.” *See* Dkt. No. 33 at 11 (emphasis added).

Although Immersion generally agrees that the description of the peripheral’s movement informs the construction of the disputed terms, restricting the real world to an “area” that does not account for the intrinsic evidence cited above and potentially changes the term to cover two-dimensional space fails to provide the claims their proper scope. Specifically, during prosecution, the examiner took a similar approach by arguing that “the free space has been construed as a space that has freedom of movement by the peripheral.” *See* Ex. E (’217 FH, 01-08-2016 Applicant Amendment) at 8. The patentee responded by again highlighting that the prior art only detected movement along the X-axis and Y-axis on a planar surface, and not, for example, in the “at least three degrees of freedom” as claimed. *See id.* These statements also further highlight how the inventor understood the invention. *See Monkeymedia*, 2022 U.S. Dist. LEXIS 213669 at *5.

Thus, Meta’s proposal should be rejected.

F. “augmented reality” (’222 patent, claim 10)

Plaintiff’s Construction	Defendants’ Construction
<p>Plain and ordinary meaning</p> <p>To the extent the Court believes that any further construction is necessary, the plain and ordinary meaning includes “an environment comprising a physical space of one or more physical objects and a virtual space of one or more virtual objects that are displayed coincident with or in association with one or more physical objects in the physical space”</p>	<p>“physical objects in a real-world, physical space are concurrently displayed with virtual objects in a virtual space”</p>

The term “augmented reality” (also referred to as “AR” or “A/R”) requires no construction beyond the plain and ordinary meaning. To the extent that any clarification is necessary, the plain and ordinary meaning of “augmented reality” can be discerned from the intrinsic evidence and includes “an environment comprising a physical space of one or more physical objects and a virtual space of one or more virtual objects that are displayed coincident with or in association with one or more physical objects in the physical space.” ’222 patent at 6:31-33; 18:18-41. The dispute here centers on whether, as Meta argues, “augmented reality” *requires* physical and virtual objects to be “concurrently” displayed, or whether, as Immersion maintains and the intrinsic record supports, the term covers physical objects that have been “augmented” in a virtual space and are thus displayed “coincident with or in association with” virtual objects.

The intrinsic evidence fully supports Immersion’s proposal of the plain and ordinary meaning. For example, the specification discloses the following explanation of Figure 3 as follows:

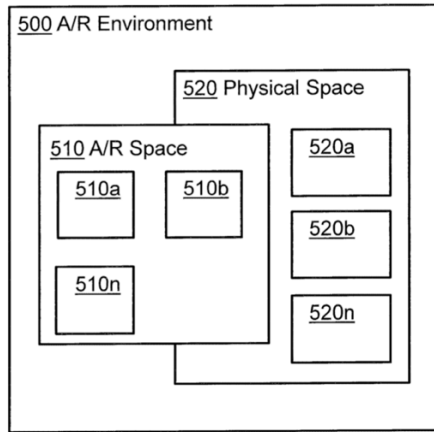


FIG. 3 illustrates a block diagram of an exemplary AR environment 500. The AR environment 500 comprises a physical space 520 comprising one or more physical objects 520 a, 520 b, . . . , 520 n and an AR space 510 comprising *one or more virtual objects 510 a, 510 b, . . . , 510 n that augment one or more physical objects 520 a, 520 b, . . . , 520 n in the physical space 520.*

'222 patent at 6:31-33. Thus, the specification recognizes that “augmented reality” comprises a physical space with one or more physical objects *and* a virtual space with one or more virtual objects that “augment” the one or more physical objects. The specification further details:

The AR environment 500 displayed via the display of the wearable AR device 200 may include the physical space 520 and the AR space 510. In some implementations, the physical space 520 may be imaged by the imaging component 150 and displayed via the display. . . . Whichever implementation to display the physical space 520 is used, *one or more virtual objects 510 a, 510 b, . . . 510 n may be displayed coincident with or in association with one or more physical objects 520 a, 520 b, . . . 520 n that exist in the physical space 520, thereby augmenting the one or more physical objects 520 a, 520 b, . . . 520 n in the AR environment 500.* A single virtual object 510 a may augment a single physical object 520 a or a plurality of physical objects 520 a, 520 b, . . . 520 n. A plurality of virtual objects 510 a, 510 b, . . . 510 n may augment a single physical object 520 a or a plurality of physical objects 520 a, 520 b, . . . 520 n. The number and types of virtual objects 510 a, 510 b, . . . 510 n that augment physical objects 520 a, 520 b, . . . 520 n that exist in the physical space 520 *is not limited* to the examples described.

'222 patent at 18:18-41. Here, the specification expressly states that “one or more virtual objects . . . may be displayed *coincident with or in association with* one or more physical objects.” *Id.* (emphasis

added). The specification makes this disclosure without reservation and is expressly “not limited” to the examples described. Accordingly, “augmented reality” can be broad enough to include examples in which the virtual objects do not augment *all* of the physical objects—i.e., in which *some* physical objects are “concurrently displayed” with the virtual objects. But this is only one embodiment. The disclosure above further encompasses the scenario where *all* “n” physical objects are “displayed coincidentally with or in association with” with “n” virtual objects. Simply put, the plain and ordinary meaning of “augmented reality” includes both examples where all displayed objects are virtual (but some virtual objects “augment” physical objects) as well as examples where some displayed objects retain their physical characteristics without augmentation.

In contrast, Meta’s proposal only encompasses the embodiment where “physical objects in a real-world, physical space are *concurrently displayed* with virtual objects in a virtual space”—that is, where the virtual objects do not augment all of the physical objects within the display, as described above. Meta yet again repeats its legal error by arguing against a plain and ordinary meaning without addressing the “exacting” standards for the “only two exceptions” against a customary meaning. *See, e.g., Nitride Semiconductors*, 2022 U.S. Dist. LEXIS 215332 at *4; *Sonrai Memory*, 2022 U.S. Dist. LEXIS at *6. Narrowing to this single embodiment is improper. *See Monkeymedia*, 2022 U.S. Dist. LEXIS 213669 at *6 (“Although the specification may indicate that a certain embodiment is preferred, a particular embodiment appearing in the specification will not be read into the claim when the claim language is broader than the embodiment.”).

Moreover, Meta does not argue that applicants disavowed any scope to narrowly limit this term to only this embodiment. Instead, Meta primarily relies on extrinsic evidence for support. But this Court “rarely” utilizes extrinsic evidence “other than in the context of a dispute over whether a claim is indefinite as a matter of law.” *Pisony v. Commando Constr., Inc.*, No. W-17-CV-00055-ADA, 2019 U.S. Dist. LEXIS 31524, at *6-8 (W.D. Tex. Jan. 23, 2019).

In any event, if the Court is inclined to consider extrinsic evidence at all, both technical and lay dictionaries from the relevant time-period support the plain and ordinary meaning proposed by Immersion. *See* Ex. B (Hutchinson Dictionary of Computing & the Internet, Helicon Publ’g 2005) (“augmented reality”: “use of computer systems and data to overlay video or other real-life representations. For example, a video of a car engine with the mechanical drawings overlaid.”); Ex. C (Merriam-Webster’s Collegiate Dictionary 11th Ed. 2003) (“augmented reality”: “an enhanced version of reality created by the use of technology to overlay digital information on an image of something being viewed through a device (as a smartphone camera); *also*: the technology being used to create augmented reality.”).

Thus, Meta’s proposal should be rejected.

G. “chain” (’222 patent, claim 15)²

Plaintiff’s Construction	Defendants’ Construction
“claim”	N/A

This typographical error should be corrected from “chain” to “claim.” Courts may correct such errors if: “(1) the correction is not subject to reasonable debate to a person of ordinary skill in the art based on consideration of the claim language and the specification; and (2) the prosecution history does not suggest a different interpretation of the claims.” *Castlemorton Wireless, LLC v. Bose Corp.*, No. 6:20-CV-00029-ADA, 2020 U.S. Dist. LEXIS 211735, at *6 (W.D. Tex. July 22, 2020). Here, before allowance, the final version of Claim 15 recited: “The system according to ***claim*** 10, wherein the wearable device comprises the haptic output device.” Ex. D (2018-05-14 Amendment/Request for Reconsideration) at 6 (emphasis added). Further, Meta does not argue for an alternative construction. Thus, this claim term should be corrected.

² Immersion filed an unopposed motion to add this claim to the case, *see* Dkt. No. 45, which the Court granted on December 21, 2022.

Date: December 21, 2022

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CERTIFICATE OF SERVICE

I hereby certify that on December 21, 2022, I electronically filed the foregoing with the Clerk of Court using the CM/ECF system which will send a notice of electronic filing to all counsel of record.

/s/ Stefan Szpajda
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